

(19) World Intellectual Property
Organization
International Bureau



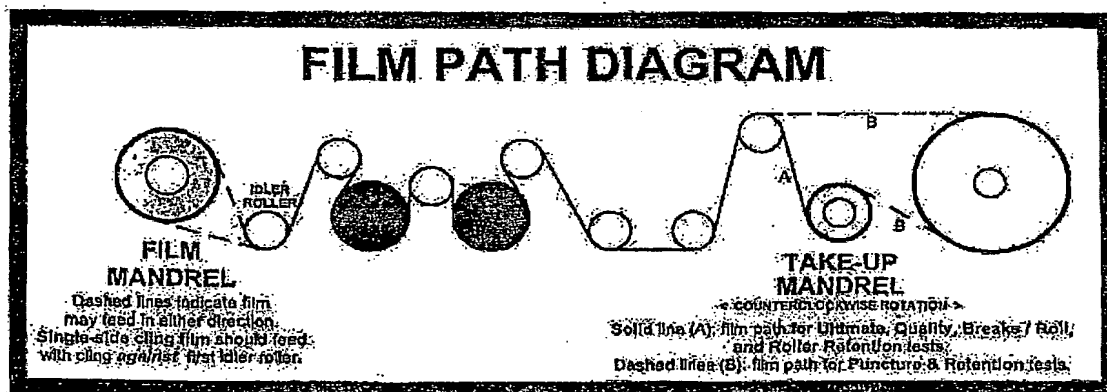
(43) International Publication Date
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number
WO 2005/065945 A1

- (51) International Patent Classification⁷: **B32B 27/32** Brazoria, TX 77422 (US). **PIRTLE, Shaun, E.** [US/US]; 7100 County Road 506, Brazoria, TX 77422 (US).
- (21) International Application Number: PCT/US2004/039823 (74) Agent: **HOPPE, James, T.**; The Dow Chemical Company, Intellectual Property, P.O. Box 1967, Midland, MI 48674-1967 (US).
- (22) International Filing Date: 29 November 2004 (29.11.2004) (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/530,778 18 December 2003 (18.12.2003) US
60/581,917 22 June 2004 (22.06.2004) US
- (71) Applicant (for all designated States except US): **DOW GLOBAL TECHNOLOGIES, INC.** [US/US]; Washington Street, 1790 Building, Midland, MI 48674 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **LIANG, Wenbin** [US/US]; 6319 Aspen Cove Court, Sugar Land, TX 77479 (US). **RAMSEY, David, B.** [US/US]; 508 East Miller, Angleton, TX 77515 (US). **DEKUNDER, Staci, A.** [US/US]; 2927 Castlerock Court, Pearland, TX 77584 (US). **SEHANOBISH, Kalyan** [US/US]; 229 Buffalo Trail, Lake Jackson, TX 77566 (US). **NIETO, Jesus** [ES/US]; 209 Larkspur, Lake Jackson, TX (US). **PRESA, John, L.** [US/US]; Route 6, Number 12 Bonnie Lane,
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FILM WITH SUPERIOR IMPACT RESISTANCE AND IMPROVED CATASTROPHIC FAILURE RESISTANCE UNDER HIGH STRAIN RATE



(57) Abstract: Stretch films which exhibit good puncture and impact resistance while also exhibiting resistance to defect propagation are desired. The films of the present invention have an ultimate stretch of at least 200 percent, a dart impact strength of at least about 700 gms/mil and a catastrophic failure stretch of at least 95 percent of the elongation to break value (CF of 5 or less). The films preferably comprise at least 3 layers and preferably comprise at least 50 percent by weight of polyethylene polymers.

WO 2005/065945 A1

BEST AVAILABLE COPY